1 2	HOLOGRAPHIC SYSTEM OR ELEMENT .Authentication	196	DEFLECTION USING A MOVING ELEMENT OR MEDIUM (OFFSETTING OR
3	.Having particular recording medium		CHANGING AT LEAST A PORTION OF THE BEAM)
4	Recyclable	197	.Using a periodically moving
5	Magnetic material		element (periodic change of
6	Sandwich having photoconductor		optically reflecting,
7	Crystalline material		refracting or diffracting
8	Having nonplanar recording	100	element)
9	medium surface	198	Particular mount or driver for element
9	.For synthetically generating a	199	Particular oscillating driver
10	hologram .Using modulated or plural	200	Bearing or shaft for rotary
10	reference beams		driver
11	Spatial, phase or amplitude	201	Plural moving scanning elements
T.T.	modulation	202	X-Y scanner
12	.Copying by holographic means	203	Having a common axis of
13	.Head up display		rotation
14		204	Utilizing plural light beams
15	Holograph on curved substrate	205	Having particular focusing
	.Using a hologram as an optical element		element to receive scanned light
16	With aberration correction	206	High distortion lens (e.g., f0
17	Scanner		lens, etc.)
18	Flat rotating disk	207	Anamorphic element
19	Lens	208	Concave reflector
20	<pre>Multiple point hologram (e.g., fly-eye lens, etc.)</pre>	209	Including transmissive type moving element
21	.Having defined page composer	210	Having moving lens
22	.For producing or reconstructing	211	Having moving prism
	images from multiple holograms	212	Including reflective type
	(e.g., color, etc.)	212	moving element
23	Holographic stereogram	213	Having oscillating element
24	Superimposed holograms only	214	Single plane mirror element
25	Discrete hologram only	215	With imaging lens
26	Sequential frames on moving	216	Having multifaceted rotating
	film	210	element
27	.Having particular laser source	217	With facets parallel to
28	.Having multiple object beam or	217	rotation axis
	diffuse object illumination	218	Having six, seven, or eight
29	.Fourier transform holography	210	facets
30	.Having optical element between	219	Having five or fewer facets
	object and recording medium	220	Having planar rotating
31	Focused image holography	220	reflector with transverse
32	.For reconstructing image		rotation axis
33	Real image	221	Having planar rotating
34	.With optical waveguide	221	reflector with rotation axis
35	.Hardware for producing a		in its plane
	hologram	222	.By frustrated total internal
107	OPTICAL COMPUTING WITHOUT		reflection
	DIFFRACTION	223	.By moving a reflective element
108	.Logic gate	224	Reflective element moved by deformable support

225	Pivoting or moving in circular	257	Pockel`s cell
223	arc	258	Kerr cell
226	Rotating	259	Plural modulation cells
227	LIGHT CONTROL BY OPAQUE ELEMENT	260	Etalon structure
	OR MEDIUM MOVABLE IN OR	261	Multiple reflections within
	THROUGH LIGHT PATH		cell
228	.Fluid	262	Excitation by electron beam
229	.With glare or flicker	263	By reflection
	elimination	264	Pulse modulation
230	.Electro-mechanical	265	Electrochromic
231	String or ribbon type	266	Particular nonplanar
232	.Slit type		electrode arrangement
233	.With relative motion of two	267	Reflection-type (e.g.,
	apertured elements		display device)
234	.With rotating or pivoting	268	Complementary device
	element (e.g., scanning discs)	269	Particular counter
235	Continuously rotating apertured		electrode
	element	270	Particular electrolyte
236	Element rotates about axis		layer
	perpendicular to light path	271	Particular planar electrode
237	OPTICAL MODULATOR		pattern
238	.Light wave temporal modulation	272	Liquid cell
	(e.g., frequency, amplitude,	273	Particular electrochromic
	etc.)		layer structure
239	Modulator output feedback to	274	Diverse layer
	modulator	275	Transmission-type (e.g.,
240	Changing bulk optical parameter		windows)
241	By actinic radiation (e.g.,	276	Amplitude modulation
	photochromic)	277	Within display element
242	Display device	278	Frequency modulation
243	Bistable device	279	Phase modulation
244	Opto-optical device	280	Magneto-optic
245	Electro-optic	281	Modulation of polarized light
246	Modulation of polarized light		via modulating input signal
	via modulating input signal	282	Using layered structure or
247	Using reflective or cavity		plural mediums
	structure	283	With particular direction of
248	Semiconductor		the field in relation to the
249	Compensation technique		medium, beam direction or
250	Using plural mediums		polarization
251	With particular direction of	284	Amplitude modulation
	the field in relation to the	285	Acousto-optic
	medium, beam direction or	286	Amplitude modulation
0.5.0	polarization	287	Frequency modulation
252	With particular medium or	288	Thermo-optic
0.5.0	state of the medium	289	Amplitude modulation
253	Liquid medium	290	By changing physical
254	With particular electrode		characteristics (e.g., shape,
	structure or arrangement, or		size or contours) of an
	medium mounting structure or	001	optical element
255	arrangement	291	Shape or contour of light
255	With particular field		control surface altered
256	With birefringent element		

292	Light control surface forms image on projected light beam	331	.Optical laser acoustic delay line type
293	Electron beam causes surface alteration	332	.Dielectric optical waveguide
294	Using photoconductive layer	333	type  OPTICAL AMPLIFIER
295		334	
	Having multiple electrodes	335	.Raman or Brillouin process
296	Changing position or		.Free electron
	orientation of suspended particles	336	.Bistable
297	_	337	.Correction of deleterious effects
291	Light control surface formed or destroyed	227 1	
298	.Light wave directional	337.1	Spectral gain flattening or
290	modulation (e.g., deflection	337.11	equalization
	or scanning is representative		Feedback
	of the modulating signal)	337.12	Using number of signals
299	Opto-optical device	337.13	Adjusting input signal power
300	Phase conjugate	337.2	Filtering (e.g., noise)
301	Acting on polarized light	337.21	Grating
302	Using reflecting or cavity	337.22	Interferometer or interference
	structure	337.3	Additional dopant or host composition
303	Using more than one	337.4	Complementary, adjusting stages
	polarization (e.g., digital)	337.5	.Dispersion compensation
304	Using single polarization	338	Using phase conjugation
305	Acousto-optic	339	Using saturable or spatial
306	Correlation or convolution		filter
307	Utilizing optical feedback	340	.Mode locked
308	Filter	341.1	.Optical fiber
309	Acting on polychromatic light	341.2	Bi-directional
310	Plural cell array	341.3	Pumping
311	Plural transducers on single	341.31	Operating frequency
	cell	341.32	Radiation routing
312	Single transducer generating	341.33	With multiple systems
	composite plural frequency	341.4	Feedback
0.1.0	acoustic wave	341.41	Automatic Gain Control (AGC)
313	Particular cell shape	341.42	Automatic Level Control (ALC)
314	Particular cell orientation	341.43	Surge protection
315	Electro-optic	341.44	Fault detection
316	Plural modulation cells	341.5	Composition (e.g., Tm, Tb, Eu,
317	Multiple reflections within		Ho, Dy, Nd)
0.1.0	cell	342	.Particular active medium (e.g.,
318	By reflection		crystal, plasma, fluid, etc.)
319	Focusing	343	Glass (amorphous)
320	Switching	344	Semiconductor
321	.Having particular chemical	345	.Particular pumping type (e.g.,
	composition or structure		electrical, optical, nuclear,
322	Electro-optic crystal material		magnetic, etc.)
323	PLZT material	346	.Particular resonator cavity
324	Magneto-optic crystal material		(e.g., scanning, confocal or
325	OPTICAL DEMODULATOR		folded mirrors, etc.)
326	OPTICAL FREQUENCY CONVERTER	347	.Multiple pass
327	.Raman type	348	Regenerative
328	.Harmonic generator	349	.Beam combination or separation
329	Third harmonic	350	HAVING SIGNIFICANT INFRARED OR
330	.Parametric oscillator		ULTRAVIOLET PROPERTY

351	.Having folded optical path	390	With illuminator support
352	.Having polarizing element	391	Stage or slide carrier
353	.Including alternative optical	392	Adjustable along optical axis
	path or optical element (e.g.,	393	With plural transverse
	day-night, hi-low		movements
	magnification)	394	With turntable
354	.Including continuously variable	395	With temperature control
	magnification or focal length	396	Transparent slide
	(zoom lens, adjustable lens)	397	Reference lines or grids
355	Lens, lens system or component	398	Specimen cavity or chamber
356	Infrared lens	399	.Telescope
357	Having four or more components	400	With viewed screen
358	.Fluid filter or fluid mirror	401	With image anti-rotation
359	.Multilayer filter or multilayer	402	Periscope
	reflector	403	With plural optical axes
360	Having metal layer	404	Binocular
361	.Having ultraviolet absorbing or	405	With mechanical adjustment
	shielding property	406	Extensible structure
362	COMPOUND LENS SYSTEM	407	Binocular
363	.With image recorder	408	Foldable or collapsible
364	.With curved reflective imaging	409	Body supported or with handle
	element	410	With focusing means
365	Two or more in a series	411	With adjustable interocular
366	Concave, convex combination		distance
367	.Right angle inspector	412	With adjustable interocular
368	.Microscope		distance
369	With viewed screen	413	Oculars swing about central
370	Interference		axis
371	Using polarized light	414	Spacing of optical elements
372	With plural optical axes		axially adjustable
373	Side-by-side fields	415	Oculars rotate about separate
374	Plural oculars		axes
375	Binocular	416	Spacing of optical elements
376	Stereoscopic		axially adjustable
377	With single or parallel objectives	417	<pre>Spacing of optical elements axially adjustable</pre>
378	For viewing stereo pairs	418	Spacing of optical elements
379	Spacing of optical elements		axially adjustable
	axially adjustable	419	With plural optical axes
380	Variable magnification	420	Plural magnification in same
381	Imaging elements movable in and		viewing field
	out of optical axis	421	Selectable magnification
382	Entire microscope adjustable	422	Variable magnification
	along optical axis	423	With relay
383	Focus adjustment	424	With reticle
384	With rotatable adjustment	425	Focusing or relatively sliding
385	Illuminator		barrels
386	Using polarized light	426	Internal focusing
387	With annular lighting	427	With reticle
	structure	428	With reticle
388	With optical switching means	429	With line of sight adjustment
389	With illumination and viewing	430	Equatorial mount
	paths coaxial at the image	431	With prism or U-shaped optical
	field		path

432	.Variable magnification	472	Pictures offset, transposed or
433	.With tilted lens or tilted image		have respective right or left
	plane		sides adjacent
434	.With relay	473	Ocular spacing or angle between
435	Repetitious lens structure		ocular axes adjustable
436	SCALE OR INDICIA READING	474	Collapsible
437	.Polarizer	475	Having illumination
438	.Prism	476	Ocular to picture distance
439	.Mirror	1,0	adjustable
440	.Lens	477	Supporting, mounting, enclosing
		1//	or light shielding structure
441	Movable or adjustable	478	RELIEF ILLUSION
442	Along scale or indicia	_	
443	PROJECTION SCREEN	479	.Reflected line of sight
444	.With sound producer	480	BINOCULAR DEVICES
445	.Acoustical	481	.Binocular loupe type
446	.Moving during projection	482	.Reflected line of sight
447	.Tracing (e.g., camera lucida,	483	POLARIZATION WITHOUT MODULATION
	etc.)	484	.Time invariant electric,
448	.With lens (e.g., camera obscura,		magnetic, or electromagnetic
	etc.)		field responsive (e.g.,
449	.With reflector or additional		electro-optical, magneto-
	screen		optical)
450	.Border, mask, shade, or curtain	485	.Light polarization without any
451	.Curved		external input
452	.Embedded particles	486	By grid or dipoles
453	-	487	By reflection or refraction
	Rear projection screen		(e.g., Brewster angle)
454	.Unitary sheet comprising plural	488	With particular medium
4	refracting areas	489	Polarization (direction or
455	Lenticular	100	magnitude) varies over surface
456	Rear projection screen		of the medium (e.g.,
457	With Fresnel lens		vectograph)
458	Stereoscopic imaging or three	490	By dichroic medium
	dimensional imaging	491	Stain or dye
459	.Unitary sheet comprising plural		
	reflecting areas	492	Oriented particles
460	.Rear projection screen	493	Glare prevention by
461	.Roll up screen		discriminating against
462	STEREOSCOPIC	404	polarized light
463	.Having record with lenticular	494	By birefringent element
	surface	495	For beam deflection or
464	.With right and left channel		splitting
	discriminator (e.g., polarized	496	Prisms
	or colored light)	497	Using plural elements
465	Using polarized light	498	Frequency filter or
466	.Stereo-viewers		interference effects
467		499	Using compensation techniques
	View changers	500	With particular material or
468	Picture moves linearly past		mounting structure
4.60	viewing aperture	501	By relatively adjustable
469	Using film strips	<del>-</del>	superimposed or in series
470	Compensates for camera position		polarizers
	(e.g., plotting or mapping	502	With color filter
	type)	503	EXTENDED SPACING STRUCTURE FOR
471	Reflected line of sight	505	OPTICAL ELEMENTS
		504	.Wide angle (e.g., door peep)
		J04	.wide andre (e.g., door peep)

505	.With screen or reticle in real image plane	540	<pre>Placed on top of binder (e.g.,   resin, asphalt, glue, etc.)</pre>
506	.Extension of tubular element adjustable	541	With single transparent coating between spheres and
507	PROTECTION FROM MOISTURE OR		atmosphere
	FOREIGN PARTICLE	542	Plural refracting elements
508	.Optical element rotates		formed as a unitary mass
509	.Fluid directed across optical	543	With individual reflector
	element		element mount
510	.Microscope drape	544	Including a snap, spring clip,
511	.Cap or cover		or spring retainer
512	.Humidity or temperature control	545	Including a threaded member
513	.Sealing	546	.Discrete reflecting elements
514	Mirror, prism or signal	- 4-	formed as a unitary mass
	reflector	547	Mounted on or adjacent roadway
515	SIGNAL REFLECTOR	548	Mounted on vehicle
516	.Body carried	549	Rigidly mounted on vehicle
517	Worn by hand or wrist	550	Bicycle or motorcycle
518	Permanently fixed to clothing	551	.Mounted on roadway
519	Worn over clothing	552	.Mounted adjacent roadway
520	.Moving	553	.Emergency or temporary
521	Pedal mounted		reflectors (i.e., portable self standing)
522 523	Rotating	554	IMAGE STABILIZATION
523 524	Spoke mounted	555	.By movable reflective structure
524	Tire, wheel, valve stem, hub cap, or axle mounted	556	Having plural reflecting
525	Wind driven	330	surfaces
526	Wild driven	557	.By movable refractive structure
		558	DIFFRACTION
527	.For a signal source remote from	558 559	DIFFRACTION
	.For a signal source remote from observer		
527	.For a signal source remote from		<pre>DIFFRACTION .Using Fourier transform spatial</pre>
527	<ul><li>.For a signal source remote from observer</li><li>.Light transmitting from source</li></ul>	559	<pre>DIFFRACTION .Using Fourier transform spatial   filtering</pre>
527 528	<ul><li>.For a signal source remote from observer</li><li>.Light transmitting from source behind a reflector</li></ul>	559	<pre>DIFFRACTION .Using Fourier transform spatial   filteringFor convolution (cross-</pre>
527 528	<ul><li>.For a signal source remote from observer</li><li>.Light transmitting from source behind a reflector</li><li>.3-Corner retroreflective (i.e.,</li></ul>	559 560	<pre>DIFFRACTION .Using Fourier transform spatial   filteringFor convolution (cross-   correlation)</pre>
527 528	<ul> <li>.For a signal source remote from observer</li> <li>.Light transmitting from source behind a reflector</li> <li>.3-Corner retroreflective (i.e., cube corner, trihedral, or</li> </ul>	559 560 561 562	<pre>DIFFRACTION .Using Fourier transform spatial   filteringFor convolution (cross-   correlation)For correlation</pre>
<ul><li>527</li><li>528</li><li>529</li></ul>	<ul> <li>.For a signal source remote from observer</li> <li>.Light transmitting from source behind a reflector</li> <li>.3-Corner retroreflective (i.e., cube corner, trihedral, or triple reflector type)</li> </ul>	559 560 561 562 563	DIFFRACTION .Using Fourier transform spatial filteringFor convolution (cross-correlation)For correlationFor changing zeroth order intensityWith diffraction grating
<ul><li>527</li><li>528</li><li>529</li><li>530</li></ul>	<ul> <li>.For a signal source remote from observer</li> <li>.Light transmitting from source behind a reflector</li> <li>.3-Corner retroreflective (i.e., cube corner, trihedral, or triple reflector type)</li> <li>.Unitary plate or sheet comprising plural reflecting elements</li> </ul>	559 560 561 562 563 564	DIFFRACTION  .Using Fourier transform spatial filtering For convolution (cross-correlation) For correlation For changing zeroth order intensity
<ul><li>527</li><li>528</li><li>529</li><li>530</li><li>531</li></ul>	.For a signal source remote from observer .Light transmitting from source behind a reflector .3-Corner retroreflective (i.e., cube corner, trihedral, or triple reflector type)Unitary plate or sheet comprising plural reflecting elementsMounted on roadway	559 560 561 562 563 564 565	DIFFRACTION  .Using Fourier transform spatial filtering For convolution (cross-correlation) For correlation For changing zeroth order intensity With diffraction grating With photographic media  .From zone plate
<ul><li>527</li><li>528</li><li>529</li><li>530</li><li>531</li><li>532</li></ul>	.For a signal source remote from observer .Light transmitting from source behind a reflector .3-Corner retroreflective (i.e., cube corner, trihedral, or triple reflector type) .Unitary plate or sheet comprising plural reflecting elementsMounted on roadwayMounted adjacent roadway	559 560 561 562 563 564 565 566	DIFFRACTION  .Using Fourier transform spatial filtering For convolution (cross-correlation) For correlation For changing zeroth order intensity With diffraction grating With photographic media  .From zone plate  .From grating
<ul> <li>527</li> <li>528</li> <li>529</li> <li>530</li> <li>531</li> <li>532</li> <li>533</li> </ul>	.For a signal source remote from observer .Light transmitting from source behind a reflector .3-Corner retroreflective (i.e., cube corner, trihedral, or triple reflector type) .Unitary plate or sheet comprising plural reflecting elementsMounted on roadwayMounted adjacent roadwayMounted on vehicle	559 560 561 562 563 564 565	DIFFRACTION  .Using Fourier transform spatial filtering For convolution (cross-correlation) For correlation For changing zeroth order intensity With diffraction grating With photographic media  .From zone plate  .From grating For ornamental effect or
<ul><li>527</li><li>528</li><li>529</li><li>530</li><li>531</li><li>532</li></ul>	.For a signal source remote from observer .Light transmitting from source behind a reflector .3-Corner retroreflective (i.e., cube corner, trihedral, or triple reflector type) .Unitary plate or sheet comprising plural reflecting elementsMounted on roadwayMounted adjacent roadwayMounted on vehicle .Including a curved refracting	559 560 561 562 563 564 565 566 567	DIFFRACTION  .Using Fourier transform spatial filtering For convolution (cross-correlation) For correlation For changing zeroth order intensity With diffraction grating With photographic media From zone plate From grating For ornamental effect or display
<ul> <li>527</li> <li>528</li> <li>529</li> <li>530</li> <li>531</li> <li>532</li> <li>533</li> <li>534</li> </ul>	.For a signal source remote from observer  .Light transmitting from source behind a reflector .3-Corner retroreflective (i.e., cube corner, trihedral, or triple reflector type)  .Unitary plate or sheet comprising plural reflecting elementsMounted on roadwayMounted adjacent roadwayMounted on vehicle .Including a curved refracting surface	559 560 561 562 563 564 565 566	DIFFRACTION  .Using Fourier transform spatial filtering For convolution (cross-correlation) For correlation For changing zeroth order intensity With diffraction grating With photographic media From zone plate From grating For ornamental effect or display For diffractive subtractive
<ul> <li>527</li> <li>528</li> <li>529</li> <li>530</li> <li>531</li> <li>532</li> <li>533</li> <li>534</li> <li>535</li> </ul>	.For a signal source remote from observer  .Light transmitting from source behind a reflector .3-Corner retroreflective (i.e., cube corner, trihedral, or triple reflector type)Unitary plate or sheet comprising plural reflecting elementsMounted on roadwayMounted adjacent roadwayMounted on vehicle .Including a curved refracting surfaceWithin individual indentations	559 560 561 562 563 564 565 566 567	DIFFRACTION  .Using Fourier transform spatial filtering For convolution (cross-correlation) For correlation For changing zeroth order intensity With diffraction grating With photographic media  .From zone plate  .From grating For ornamental effect or display For diffractive subtractive filtering
<ul> <li>527</li> <li>528</li> <li>529</li> <li>530</li> <li>531</li> <li>532</li> <li>533</li> <li>534</li> <li>535</li> <li>536</li> </ul>	.For a signal source remote from observer  .Light transmitting from source behind a reflector .3-Corner retroreflective (i.e., cube corner, trihedral, or triple reflector type)Unitary plate or sheet comprising plural reflecting elementsMounted on roadwayMounted adjacent roadwayMounted on vehicle .Including a curved refracting surfaceWithin individual indentationsMinute transparent spheres	559 560 561 562 563 564 565 566 567	DIFFRACTION  .Using Fourier transform spatial filtering For convolution (cross-correlation) For correlation For changing zeroth order intensity With diffraction grating With photographic media  .From zone plate  .From grating For ornamental effect or display For diffractive subtractive filtering Including particular grating
<ul> <li>527</li> <li>528</li> <li>529</li> <li>530</li> <li>531</li> <li>532</li> <li>533</li> <li>534</li> <li>535</li> </ul>	.For a signal source remote from observer .Light transmitting from source behind a reflector .3-Corner retroreflective (i.e., cube corner, trihedral, or triple reflector type)Unitary plate or sheet comprising plural reflecting elementsMounted on roadwayMounted adjacent roadwayMounted on vehicle .Including a curved refracting surfaceWithin individual indentationsMinute transparent spheresDirectional reflection (e.g.,	559 560 561 562 563 564 565 566 567 568	DIFFRACTION  .Using Fourier transform spatial filtering For convolution (cross-correlation) For correlation For changing zeroth order intensity With diffraction grating With photographic media  .From zone plate  .From grating For ornamental effect or display For diffractive subtractive filtering  .Including particular grating characteristic
<ul> <li>527</li> <li>528</li> <li>529</li> <li>530</li> <li>531</li> <li>532</li> <li>533</li> <li>534</li> <li>535</li> <li>536</li> </ul>	.For a signal source remote from observer  .Light transmitting from source behind a reflector .3-Corner retroreflective (i.e., cube corner, trihedral, or triple reflector type)Unitary plate or sheet comprising plural reflecting elementsMounted on roadwayMounted adjacent roadwayMounted on vehicle .Including a curved refracting surfaceWithin individual indentationsMinute transparent spheresDirectional reflection (e.g., prevent viewing unless	559 560 561 562 563 564 565 566 567	DIFFRACTION  .Using Fourier transform spatial filtering For convolution (cross-correlation) For correlation For changing zeroth order intensity With diffraction grating With photographic media  .From zone plate  .From grating For ornamental effect or display For diffractive subtractive filtering Including particular grating characteristic Nonplanar grating substrate
<ul> <li>527</li> <li>528</li> <li>529</li> <li>530</li> <li>531</li> <li>532</li> <li>533</li> <li>534</li> <li>535</li> <li>536</li> </ul>	.For a signal source remote from observer  .Light transmitting from source behind a reflector .3-Corner retroreflective (i.e., cube corner, trihedral, or triple reflector type) .Unitary plate or sheet comprising plural reflecting elementsMounted on roadwayMounted adjacent roadwayMounted on vehicle .Including a curved refracting surfaceWithin individual indentationsMinute transparent spheresDirectional reflection (e.g., prevent viewing unless critical angle of light is	559 560 561 562 563 564 565 566 567 568 569 570	JIFFRACTION  .Using Fourier transform spatial filtering For convolution (cross-correlation) For correlation For changing zeroth order intensity With diffraction grating With photographic media  .From zone plate  .From grating For ornamental effect or display For diffractive subtractive filtering Including particular grating characteristic Nonplanar grating substrate (e.g., concave)
527 528 529 530 531 532 533 534 535 536 537	.For a signal source remote from observer  .Light transmitting from source behind a reflector .3-Corner retroreflective (i.e., cube corner, trihedral, or triple reflector type)  .Unitary plate or sheet comprising plural reflecting elements Mounted on roadwayMounted adjacent roadwayMounted on vehicle .Including a curved refracting surfaceWithin individual indentationsMinute transparent spheresDirectional reflection (e.g., prevent viewing unless critical angle of light is used)	559 560 561 562 563 564 565 566 567 568 569 570 571	DIFFRACTION  .Using Fourier transform spatial filtering For convolution (cross-correlation) For correlation For changing zeroth order intensity With diffraction grating With photographic media  .From zone plate  .From grating For ornamental effect or display For diffractive subtractive filtering Including particular grating characteristic Nonplanar grating substrate (e.g., concave) Echelette or blazed grating
<ul> <li>527</li> <li>528</li> <li>529</li> <li>530</li> <li>531</li> <li>532</li> <li>533</li> <li>534</li> <li>535</li> <li>536</li> </ul>	.For a signal source remote from observer  .Light transmitting from source behind a reflector .3-Corner retroreflective (i.e., cube corner, trihedral, or triple reflector type)  .Unitary plate or sheet comprising plural reflecting elements Mounted on roadwayMounted adjacent roadwayMounted on vehicle .Including a curved refracting surfaceWithin individual indentationsMinute transparent spheresDirectional reflection (e.g., prevent viewing unless critical angle of light is used)On flexible substrate (e.g.,	559 560 561 562 563 564 565 566 567 568 569 570	DIFFRACTION  .Using Fourier transform spatial filtering For convolution (cross-correlation) For correlation For changing zeroth order intensity With diffraction grating With photographic media  .From zone plate  .From grating For ornamental effect or display For diffractive subtractive filtering Including particular grating characteristic Nonplanar grating substrate (e.g., concave) Echelette or blazed grating Reflection grating (e.g.,
527 528 529 530 531 532 533 534 535 536 537	.For a signal source remote from observer  .Light transmitting from source behind a reflector .3-Corner retroreflective (i.e., cube corner, trihedral, or triple reflector type)  .Unitary plate or sheet comprising plural reflecting elements Mounted on roadwayMounted adjacent roadwayMounted on vehicle .Including a curved refracting surfaceWithin individual indentationsMinute transparent spheresDirectional reflection (e.g., prevent viewing unless critical angle of light is used)On flexible substrate (e.g., flexible sheeting, bumper	559 560 561 562 563 564 565 566 567 568 569 570 571 572	JIFFRACTION  .Using Fourier transform spatial filtering For convolution (cross-correlation) For correlation For changing zeroth order intensity With diffraction grating With photographic media From zone plate From grating For ornamental effect or display For diffractive subtractive filtering Including particular grating characteristic Nonplanar grating substrate (e.g., concave) Echelette or blazed grating Reflection grating (e.g., retrodirective)
527 528 529 530 531 532 533 534 535 536 537	.For a signal source remote from observer  .Light transmitting from source behind a reflector .3-Corner retroreflective (i.e., cube corner, trihedral, or triple reflector type)  .Unitary plate or sheet comprising plural reflecting elements Mounted on roadwayMounted adjacent roadwayMounted on vehicle .Including a curved refracting surfaceWithin individual indentationsMinute transparent spheresDirectional reflection (e.g., prevent viewing unless critical angle of light is used)On flexible substrate (e.g.,	559 560 561 562 563 564 565 566 567 568 569 570 571	DIFFRACTION  .Using Fourier transform spatial filtering For convolution (cross-correlation) For correlation For changing zeroth order intensity With diffraction grating With photographic media From zone plate From grating For ornamental effect or display For diffractive subtractive filtering Including particular grating characteristic Nonplanar grating substrate (e.g., concave) Echelette or blazed grating Reflection grating (e.g., retrodirective) Variable grating
527 528 529 530 531 532 533 534 535 536 537	.For a signal source remote from observer  .Light transmitting from source behind a reflector .3-Corner retroreflective (i.e., cube corner, trihedral, or triple reflector type)  .Unitary plate or sheet comprising plural reflecting elements Mounted on roadwayMounted adjacent roadwayMounted on vehicle .Including a curved refracting surfaceWithin individual indentationsMinute transparent spheresDirectional reflection (e.g., prevent viewing unless critical angle of light is used)On flexible substrate (e.g., flexible sheeting, bumper sticker, etc.)	559 560 561 562 563 564 565 566 567 568 569 570 571 572	JIFFRACTION  .Using Fourier transform spatial filtering For convolution (cross-correlation) For correlation For changing zeroth order intensity With diffraction grating With photographic media From zone plate From grating For ornamental effect or display For diffractive subtractive filtering Including particular grating characteristic Nonplanar grating substrate (e.g., concave) Echelette or blazed grating Reflection grating (e.g., retrodirective)

575	With nonuniform corrugation	608	Translucent or other
	width, spacing, or depth		semitransmitting panel
576	Laminated or layered		selectively positioned in
577	LIGHT INTERFERENCE		front of mirror
578	.Electrically or mechanically	609	.Display window
	variable (e.g., tunable,	610	.With blind for nonviewing eye
	adjustable)	611	.Barrel end or lens mount shade
579	By nonmovable driving element	612	Collapsible or foldable
	(e.g., piezoelectric,	613	.Directional or angular
	magnetostrictive)		discrimination
580	.Produced by coating or lamina	614	.With absorption means
581	By transmissive coating on lens	615	LIGHT DISPERSION
582	Layer having specified	616	KALEIDOSCOPE
	nonoptical property	617	.Including particles loosely
583	Beam splitter or combiner		housed for agitation
584	Reflector	618	SINGLE CHANNEL SIMULTANEOUSLY TO
585	Including metal or conductive layer		OR FROM PLURAL CHANNELS (E.G., LIGHT DIVIDING, COMBINING, OR
586	Layers having specified index		PLURAL IMAGE FORMING, ETC.)
	of refraction	619	.By surface composed of
587	Plural layer groups lateral in		lenticular elements
	parallel light paths	620	Having particular composition
588	Filter having four or more	621	Plural lenticular plates
	layers	622	Serially disposed along optic
589	Selective wavelength		axis
	transmission or reflection	623	Cylindrical lenslets
590	Having another filter	624	Having crossed axes
591	BUILDING INTERIOR ILLUMINATION	625	Focusing or defocusing by
	WITH REFLECTED, REFRACTED OR		noncurved surfaces (e.g.,
	PREDETERMINED ANGLE OF		prismatic, etc.)
	ENTRANCE OF OUTSIDE LIGHT	626	Particular focusing or
592	.Unitary light transmitting		defocusing characteristic
	member comprising plural	627	Reflective
	reflecting or refracting	628	Noncircular cross section
E02	elements	629	.By partial reflection at beam
593	Plural members in series		splitting or combining surface
594	Elements on two sides of member	630	Superimposing visual
595	With internal reflections		information on observer`s
596	.Slats or strips		field of view (e.g., head-up
597	.With reflection	<b>601</b>	arrangement, etc.)
598	Internal reflection in single	631	Including curved reflector
<b>500</b>	optical element	632	Rotatable heads-up device or
599	DIFFUSING OF INCIDENT LIGHT		combiner
600	BARREL END EYE GUARD (E.G.,	633	With additional reflector
	SHIELD OR CUSHION, ETC.)		(e.g., serial reflections,
601	GLARE OR UNWANTED LIGHT REDUCTION	C24	etc.)
602	.With mirror (e.g., mirror with glare screen, etc.)	634	<pre>Wavelength selective (e.g.,   dichroic mirror, etc.)</pre>
603	Anti-glare mirror	635	Drawing or plotting aid
604	Adjustable	636	Including full reflection and
605	Plural reflecting surfaces		transmission of a beam at
606	Prismoidal		different portions of a beam
607	Reversible	<b>60</b> -	divider
		637	With path length or aberration correcting element

638	With partial reflection at a surface of a prism	681	Having eight or nine components
639	.By refraction at beam splitting	682	Having seven or less
	or combining surface		components
640	Including prismatic element	683	With mechanical compensation
641	COLLIMATING OF LIGHT BEAM	684	Other than first group moves
642	LENS		for focusing (internal focus
643	.Eyepiece		type)
644	Having four components	685	Nonlinear variator/compensator
645	Having three components		movements
646	Having two components	686	Four groups
647	Having one component	687	+ - + + Arrangement
648	.With field curvature shaping	688	+ + Arrangement
649	Projection type	689	Three groups
650	Having four components	690	+ - + Arrangement
651	Having less than four	691	Two groups
	components	692	+ - Arrangement
652	.With graded refractive index	693	With macro-type focusing
653	Having an axial gradient	694	Adjusting mechanism
654	Having a radial gradient	695	Three or more movable lens
655	In a variable media (e.g.,		groups
	gas, elastomer, etc.)	696	Motor driven
656	.Microscope objective	697	Condition responsive
657	Having seven components	698	Auto focusing
658	Having six components	699	Having cam device
659	Having five components	700	Cam groove type
660	Having four components	701	Cam ring type or zoom ring
661	Having less than four		type
	components	702	With adjustment lock
662	.High distortion lens (e.g., f0,	703	With specified mount
	etc.)	704	Having detail of barrel
663	.Telecentric system	705	With macro type focusing
664	.Spherical	706	With specific ring means
665	.Fluid	707	.Diffusing
666	With variable magnification	708	.Including a nonspherical surface
667	With gas	709	Conical
668	.Anamorphic	710	Cylindrical
669	With prism anamorphoser	711	Toroidal
670	Variable magnification	712	Paraboloidal
	anamorphoser	713	Having six components
671	Having four or more components	714	Having five components
672	.Selective magnification by	715	Having four components
	exchanging or adding a lens	716	Having three components
	component	717	Having two components
673	To the front of a basic lens	718	Having one component
674	To the middle of a basic lens	719	Objective for laser (e.g.,
675	To the rear of a basic lens		optical disc, etc.)
676	.With variable magnification	720	.Asymmetric (e.g., prismatic or
			eccentric, etc.)
677	(e.g., zoom type)	721	eccentric, etc.) .Plural focal length
	(e.g., zoom type)Optically compensated		.Plural focal length
678	<pre>(e.g., zoom type)Optically compensatedPrism lens type</pre>	721 722	.Plural focal length .Selective wavelength
678 679	<pre>(e.g., zoom type)Optically compensatedPrism lens typeWith fixed conjugates</pre>	722	.Plural focal length .Selective wavelength transmitting or blocking
678	<pre>(e.g., zoom type)Optically compensatedPrism lens type</pre>		.Plural focal length .Selective wavelength

705		770	
725	Panoramic	772	First component positive
726	.With reflecting element	773	+ - + - Arrangement
727	Including concave or convex	774	+ - + + Arrangement
	reflecting surface	775	+ + Arrangement
728	With aspheric surface (e.g.,	776	With multiple element
	Schmidt lens, etc.)		component
729	With concave and convex	777	Infinite radius
	reflectors in series	778	Having a biconvex single
730	Reflectors in series		element component
731	With concave and convex	779	$\dots$ + + - + Arrangement
	reflectors in series	780	$\dots$ + + + - Arrangement
732	For producing a double pass	781	First component negative
733	Multiple component lenses	782	+ + - Arrangement
734	Four components	783	+ + + Arrangement
735	Three components	784	Three components
736	Two components	785	+ - + Arrangement
737	.With diverse refracting element	786	With multiple element first
738	.With light limiting or		component
	controlling means	787	With multiple element second
739	Diaphragm		component
740	Between lens components	788	With multiple element third
741	.With multipart element		component
742	Echelon (e.g., Fresnel lens,	789	With first component biconvex
	etc.)	790	With third component biconvex
743	Having curvilinear lens	791	+ + - Arrangement
744	.Afocal (e.g., Galilean	792	+ + + Arrangement
	telescopes, etc.)	793	Two components
745	.Telephoto	794	+ + Arrangement
746	With five components	795	+ - Arrangement
747	With four components	796	Single component with multiple
748	With less than four components	790	elements
749	.Reverse telephoto	797	Three or more elements
750	With eight components	798	.With viewed object or viewed
750 751	With seven components	790	field illumination
751 752		799	
752 753	With six componentsWith five or less components	199	Illuminating beam coaxial with lens axis
753 754	-	800	
_	.Multiple component lenses		Illumination through lens
755	Seven components	801	With viewed object support
756	Six components	802	Magnifier
757	First component positive	803	Hand held
758	$\dots$ + - + + - + Arrangement	804	.With viewed object support
759	First two components positive	805	On lens supporting handle
760	$\dots$ + + + Arrangement	806	Relatively movable informatory
761	First component negative		sheet and lens (e.g., reading
762	First two components negative		machine, etc.)
763	Five components	807	Flat opaque document or picture
764	First component positive	808	.With lens casing
765	$\dots$ + + + Arrangement	809	.Combined with diverse art tool,
766	+ - + - + Arrangement		instrument or machine
767	First two components positive	810	Operation viewed through lens
768	+ + + Arrangement	811	.With support
769	+ + - + + Arrangement	812	With additional handle
770	First component negative	813	Lens movable in its plane
771	Four components	814	Electromagnetic motive power
–			<del>-</del>

815	<pre>Body or apparel attached or carried</pre>	851	Composite or echelon mirrors or light concentrating array
816	Monocular loupe type	852	With a line focus
817	Foldable or collapsible	853	Light concentrating (e.g.,
818	With clamp or grip		heliostat, etc.), concave, or
819	Lens mounts		paraboloidal structure
820	With temperature compensation	854	Identical side mirrors
020	or control		adjustable with respect to a
821	Plural lenses in common		central mirror
021	carrier selectively operable	855	Identical adjacent mirrors
	(e.g., turret type, etc.)		identically supported
822	Adjustable	856	With successive reflections
823	With axial adjustment (e.g.,	857	With successive reflections
020	adjustable focus, etc.)	858	Including curved mirror
824	Electromagnetic or		surfaces in series
021	piezoelectric drive	859	With concave and convex
825	Focusing ring		mirrors in series
826	Sliding barrels	860	To view observer
827	Detachably attached (e.g.,	861	With three or more successive
027	plate, barrel, etc.)		reflections
828	Bayonet coupling	862	Including an adjustable mirror
829	With threads	863	Including a curved mirror
830	With ring	864	Including adjacent plane and
831	PRISM (INCLUDING MOUNT)		curved mirrors
832	.Fluid filled	865	Relatively adjustable
833	.With reflecting surface	866	Wide angle segmented mirrors
834	Plural reflecting surfaces	867	.Concave cylindrical or providing
835	For binocular or porro-prism		a line focus
836	Roof or roof-angle	868	.With mirror surface of varied
837	With refracting surface		radius
838	MIRROR	869	Concave
839	.With a transmitting property	870	.Fracture resistant (e.g.,
840	.Back to back		shatterproof, etc.)
841	.Retractable vehicle mirror	871	.With support
842	.Mounted on vehicle having	872	Mirror movable relative to
042	handlebars (e.g., bicycle,		support
	motorcycle, etc.)	873	With rotary to linear motion
843	.Automatically adjustable in		converting mirror adjustment
013	response to vehicle position,	874	With rotation of mirror about
	control, or indicator		perpendicular axes
844	On adjustable diverse vehicle	875	With a rigid handle extending
011	portion or accessory		to or near a mirror pivot
845	.Fluid cooled mirror	876	With rotation of mirror about
846	.Including specified control or		perpendicular axes
010	retention of the shape of a	877	With switch or motor
	mirror surface		controlling mirror movement
847	Membrane mirror in mechanical	878	Fluid pressure actuated
	contact only at its edge	879	Body or apparel mirror support
848	With structure to minimize	880	Having support or apparel
0 - 0	internal mirror stress		engaging head or neck
849	Including a plurality of	881	With mirror supporting column
	adjustable mirror supports	<del>-</del>	or sliding adjustment
850	.Plural mirrors or reflecting	882	With handle
	surfaces	883	Laminated or layered mirror
			support
			<del></del>

884	.With selective absorption or
	transparent overcoating
885	ABSORPTION FILTER
886	.Fluid
887	.Sequentially additive
888	.Neutral or graded density
889	.Movable in or out of optical
	path
890	.Superimposed or series
891	.Filters in optical parallel
	(e.g., colors side-by-side,
	etc.)
892	.With support or frame
893	SCREEN (E.G., HALFTONE SCREEN,
	ETC.)
894	OPTICAL APERTURE OR TUBE, OR
	TRANSPARENT CLOSURE
895	.Submerged object viewer
896	MISCELLANEOUS

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